Citation for published version:
Arnold, R, Wagstaff, CRD, Steadman, L & Pratt, Y 2017, 'The organizational stressors encountered by athletes with a disability', *Journal of Sports Sciences*, vol. 35, no. 12, pp. 1187-1196.
https://doi.org/10.1080/02640414.2016.1214285

DOI:
10.1080/02640414.2016.1214285

Publication date:
2017

Document Version
Peer reviewed version

Link to publication

Publisher Rights
Unspecified

This is an Accepted Manuscript of an article published by Taylor & Francis in Journal of Sports Science on 29 July 2016, available online: http://www.tandfonline.com/10.1080/02640414.2016.1214285.

University of Bath

Alternative formats
If you require this document in an alternative format, please contact:
openaccess@bath.ac.uk

General rights
Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy
If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Download date: 05. May. 2023

The Organizational Stressors Encountered By Athletes with a Disability

Rachel Arnold

University of Bath

Christopher R. D. Wagstaff and Lauren Steadman

Portsmouth University

Yasmin Pratt

University of Bath

Author Note

Rachel Arnold and Yasmin Pratt, Department for Health, University of Bath; Christopher Wagstaff and Lauren Steadman, Department of Sport and Exercise Science, Portsmouth University.

Correspondence concerning this article should be addressed to Rachel Arnold, Department for Health, University of Bath, Bath, BA2 7AY, United Kingdom. Telephone: 4412-2538-5107. Fax: 4412-2538-3833. E-mail: R.S.Arnold@bath.ac.uk

Abstract

Organizational stressors have been found to be prevalent and problematic for sport performers, with research identifying demographic differences in the stressors encountered. Nevertheless, extant sport psychology research on the topic of stress has generally focused on able-bodied athletes; whilst that which has been conducted on performers with a disability has typically recruited relatively small samples to explore a narrow selection of organizational stressors, or examined other components of the stress process. The purpose of the present study was to explore the various organizational stressors that athletes with a disability encounter. The sample comprised 18 elite athletes with a disability (ten male, eight female) who had a classified disability and experience of competing at a major championships in their sport (e.g., Paralympic Games, World Championships). Participants took part in a semi-structured interview which was analyzed by drawing from grounded theory procedures. A total of 316 organizational stressors were identified, which were abstracted into 31 concepts and four, previously conceptualised, exploratory schemes: leadership and personnel issues, cultural and team issues, logistical and environmental issues, and performance and personal issues. This study not only provides the first illustration of the prevalence of organizational stressors for athletes with a disability, but also significantly points to salient similarities and distinct differences between the stress experiences of performers with and without a disability.

Keywords: demand, disability, elite, organizational stressors, Paralympic, performance.

The Organizational Stressors Encountered By Athletes with a Disability

To attain peak performances in competitive sport, athletes must ensure that they are in an optimum psychological state. This endeavour can be made challenging, however, by the various environmental demands that sport performers encounter (cf. Fletcher, Hanton, & Mellalieu, 2006). One category of demands that are particularly prevalent and problematic for athletes are those associated with the organization within which they operate. With regards to the prevalence of these demands, sport performers have been found to experience and recall more organizational stressors than those associated with competitive performances (Hanton, Fletcher, & Coughlan, 2005). Delving deeper into the specific organizational stressors that sport performers report, Arnold and Fletcher (2012b) identified 640 distinct organizational demands (with a combined sample of 1809 sport performers). The demands were categorized into leadership and personnel issues (e.g., the coach's behaviours, support staff, media), cultural and team issues (e.g., communication, roles, team atmosphere), logistical and environmental issues (e.g., facilities, selection, travel), and performance and personal issues (e.g., injuries, finances, career transitions). If organizational stressors persist yet remain unaddressed, various negative consequences can result. These include: burnout (Tabei, Fletcher, & Goodger, 2012), injury (cf. Cross, Williams, Trewartha, Kemp, & Stokes, 2015), dissatisfaction (Noblet, Rodwell, & McWilliams, 2003), negative emotions and affect (Arnold & Fletcher, 2015; Arnold, Fletcher, & Daniels, 2016; Fletcher, Hanton, & Wagstaff, 2012), impaired preparation for and performance in major competitions (Gould, Guinan, Greenleaf, Medbery, & Peterson, 1999) and substantially affected health and well-being (DiBartolo & Shaffer, 2002).

Encountering organizational stressors is not just limited to athletes, with researchers highlighting such demands in coaches (see, for a review, Fletcher & Scott, 2010), parents (see, e.g., Harwood & Knight, 2009), sports officials (see, e.g., Voight, 2009), and sport

psychologists (see, e.g., Fletcher, Rumbold, Tester, & Coombes, 2011). In addition to examining how the organizational stressors encountered vary amongst different personnel in sport (e.g., athletes, coaches, parents), research in this area has also examined how these experiences vary within a group of personnel (e.g., from athlete to athlete). To elaborate, using the Organizational Stressor Indicator for Sport Performers (OSI-SP; Arnold, Fletcher, & Daniels, 2013), Arnold and colleagues (2015) examined the extent to which the dimensions of organizational stressors that performers encountered varied as a function of gender, sport type, and performance level. The findings demonstrated that demographic differences were apparent in the dimensions of organizational stressors, with significant variation found between males and females, between team and individual based performers, and between performers competing at national or international, regional or university, and county or club levels. Specifically, it was found that males encountered significantly higher dimensions of logistics and operations organizational stressors than females, and females encountered significantly higher dimensions of selection organizational stressors than males. For sport type, it was found that those competing in team-based sports encountered significantly higher dimensions of logistics and operations, team and culture, and selection organizational stressors than those competing in more individual-based sports. Finally, it was evident that performers competing at higher performance levels typically experienced organizational stressors more frequently, at a higher intensity, and for a longer duration than those competing at lower levels.

These findings advanced theoretical knowledge by identifying which demographic differences in performers' characteristics could influence the genesis and dimensions of organizational stressors. Specifically, extant empirical testing of the meta-model of stress, emotions, and performance (cf. Fletcher et al., 2006) indicates that certain personal and situational characteristics can buffer or exacerbate the relationship between a person and their

surrounding environment. Turning from theory to practice, the demographic differences observed within the emerging literature will also enable applied practitioners to develop more appropriate and tailored interventions for sport performers (cf. Rumbold, Fletcher, & Daniels, 2012). To elaborate, it is suggested that practitioners develop stress management interventions to help performers (and/or sports organizations) eliminate or reduce the stressors that their identified group encounter heightened dimensions of or, alternatively, help these sport performers to expand their repertoire of stress management techniques so that they can lower the intensity of and better cope with such demands (Arnold et al., 2015, 2016). In view of the important implications that such explorations can have for theory and practice, it is essential for scholars to examine additional demographic differences in the organizational stressors encountered in sport.

One salient demographic variable which has surprisingly been largely elided from previous investigations in the organizational stressor literature is that of athlete disability. A potential explanation for this absence could be the levels of disability participation in sport. Specifically, Sport England (2012) identified that participation in sport among people with a long term limiting illness, disability, or infirmity (18.2%) is considerably lower than the figure for the population as a whole (35.7%). Nevertheless, this observation raises questions as to potential reasons for such substantial variance and reinforces the need to examine the organizational stressors encountered by this population. Further support for such exploration comes from the rapid growth in athletes with a disability's representation at major competitions – illustrated by 400 athletes involved in the 1960 Paralympic Games increasing to over 4250 at London 2012 (International Paralympic Committee, 2015) – combined with their increasing requests for psychological support (cf. Bawden, 2005; Blumenstein & Orbach, 2015; Dieffenbach & Statler, 2012), and the potential negative consequences of organizational stressors.

To inform an exploration of the organizational stressors encountered by athletes with a disability and further justify why this is necessary, it is important to consider the extant literature on the stress process in disability sport. Taking first the psychological mechanisms proposed to underpin stressful encounters in the theoretical meta-model (Fletcher et al., 2006), research has investigated the cognitive appraisals (see, e.g., Campbell & Jones, 2002a), coping strategies (see, e.g., Pensgaard, Roberts, & Ursin, 1999) and emotions (see, e.g., Martin & McCaughty, 2004) of athletes with a disability. Additionally, research has explored specific demands that are encountered in disability sport. Example stressors include retirement, negotiating identities, and disability facility provision (see, e.g., French & Hainsworth, 2001; Huang & Brittain, 2006; Wheeler, Malone, Vlack, Nelson, & Steadward, 1996). Typically, such studies have explored one stressor in isolation, rather than capturing the range of stressors that have been illuminated in extant literature (see, for a review, Arnold & Fletcher, 2012b). Indeed, while Arnold and Fletcher's review synthesized the organizational stressors from studies sampling able-bodied athletes, researchers (see Dieffenbach & Statler, 2012) have questioned whether the needs and experiences of athletes competing with disabilities are actually more similar to able-bodied athletes than different; thus, it appears necessary to also examine a broader range of demands faced by those competing in disability sport.

There are some studies in the literature which have examined a variety of sources of stress experienced by athletes with a disability. To elaborate, scholars have identified a range of general barriers (Dieffenbach & Statler, 2012), key social and political issues (see, e.g., Bush, Silk, Porter, & Howe, 2013) and general sources of stress (see, e.g., Campbell & Jones, 2002b) that are encountered as part of the competitive disability sport experience. Notwithstanding the contribution that such exploratory studies can make to knowledge and understanding of disability sport, no studies to date have explicitly focused on identifying the

range of organizational stressors that sport performers encounter. Furthermore, studies to date have either focused on practitioner reflections (see, e.g., Dieffenbach & Statler, 2012) or adopted relatively small samples of Paralympic athletes (see, e.g., Bush et al., 2013) who compete within the same sport (see, e.g., Campbell & Jones, 2002b). In view of these observations, no specific hypotheses are formed; however, the purpose of the present study is to explore the various organizational stressors that athletes with a disability encounter. Transformed into a research question, this would read "What are the various organizational stressors that athletes with a disability encounter? From a theoretical perspective, it is envisaged that this exploration will advance knowledge of how disability might impact a performer's perception of organizational stressors; thus contributing evidence to test the tenets of the meta-model of stress (Fletcher et al., 2006). Specifically, the meta-model suggests that certain personal and situational characteristics can influence the genesis and dimensions of organizational stressors. From a practical perspective, it is hoped that this study will offer a cultural insight into disability sport, and provide practitioners with a foundation for realistic expectations when operating and problem-solving in this context (cf. Dieffenbach & Statler, 2012).

Method

Design

In view of the lack of knowledge that currently exists regarding the organizational stressors encountered by athletes with a disability, this study was deemed best suited to qualitative methods (Silverman, 2006; Sparkes & Smith, 2014). Specifically, the method of interviews was chosen to encourage participants to provide in-depth information from their firsthand experiences of organizational stressors in disability sport (cf. Rubin & Rubin, 2011). The study draws on grounded theory procedures, which are typically used to develop concepts and/or theory that are grounded in systematically collected and analysed data

(Charmaz, 2005; Glaser & Strauss, 1967; Strauss & Corbin, 1998). Despite some debate in the literature (cf. Charmaz, 2006; Glaser, 1992; Strauss & Corbin, 1998), some proponents of grounded theory have encouraged scholars to embrace their discipline-based knowledge and bring it to the data collection and analysis procedures, provided it is relevant, appropriately applied, and grounded in both extant and emerging data (cf. Fletcher et al., 2012; Strauss, 1987). Given that this study is within an ongoing research program examining organizational stressors (cf. Arnold & Fletcher, 2012a, 2012b; Arnold et al., 2013, 2015), this study used discipline-based knowledge in the recommended manner. For instance, Arnold and Fletcher's (2012b) classification of stressors encountered by sport performers was used as a core conceptual framework in the present study, in which it initiated the enquiry, informed the labelling of the exploratory schemes, and provided a comparative tool for post-analysis. It is also important to note that although the study will draw from grounded theory procedures, it is not a "grounded theory study" per se as it will not attempt to progress to theory generation, given the lack of extant knowledge on organizational stressors in disability sport (cf. Charmaz, 2006; Corbin & Strauss, 2008; Strauss & Corbin, 1998; see also, Buman, Omli, Giacobbi, & Brewer, 2008; Pummell, Harwood, & Lavallee, 2008; Vergeer, 2006).

Participants

Participants were selected via a purposive sampling technique to ensure the representation of a variety of Paralympic sports and athletes with a disability's experiences (cf. Flick, 2009). Participants were required to have a classified disability (confirmed by their national governing body) and experience of competing at a major championship (e.g., Paralympic Games, World Championships, World Cup). The sample comprised 18 British athletes with a disability (ten male, eight female), who ranged in age from 17-39 (M_{age} = 25.44, *SD* = 6.41), and had been competing in their sport for an average of 7.42 years (*SD* = 3.55). The participants reported a range of disabilities (e.g., vision impairment, amputee,

cerebral palsy, Spina Bifida) and represented nine out of the ten eligible impairment types as classified by the Paralympic Movement (e.g., impaired muscle power, impaired passive range of movement, loss of limb or limb deficiency, leg-length difference, short stature, hypertonia, ataxia, athetosis, and visual impairment). The participants also represented a diversity of individual and team sports, including: swimming (n = 4), para-canoe (n = 1), para-triathlon (n = 5), athletics (n = 3), cycling (n = 1), golf (n = 1), wheelchair basketball (n = 2), and cricket (n = 1).

Procedure

After obtaining institutional ethical approval for the study, athletes with a disability who met the inclusion criteria (e.g., a classified disability and experience of competing at a major championships) were contacted by email. Emails were initially sent to a range of national governing bodies, coaches, and relevant contacts in the authors' sporting networks. Responses from these emails identified potential participants and their contact details if they were happy to hear more about the study. The subsequent participant communication informed them about the study, what involvement would entail, their ethical rights, and, finally, invited them to participate. Those athletes with a disability who then expressed an interest in participating were contacted to arrange a convenient time and location for the interview. All of the participants provided informed consent prior to the start of data collection. The interviews, which lasted for an average of 60.53 minutes (*SD* = 17.34), were conducted face to face or over Skype, in English, digitally recorded in their entirety, and transcribed verbatim.

Interview Guide

To assist with the interviews, an interview guide was developed (available on request from the corresponding author). The first section reminded participants about what the study entailed and their ethical rights, before inviting participants to voluntarily proceed with the

interview. The second section comprised introductory questions to explore and gain insight into the participant's background and sporting involvement. The third section consisted of questions to explore the athletes with a disability's experiences of their organizational environments in sport. To truly capture the participant's experiences, the interviewer continually sought to challenge personal and participant conceptions of the events discussed in this section. To assist with the questioning and investigate the topic in greater breadth and depth, a combination of clarification, elaboration, and general probes were used (Patton, 2002), as well as asking for examples to illustrate the points made. Furthermore, questions were flexible and evolutionary (cf. Corbin & Strauss, 2008; Strauss & Corbin, 1998), in that they were developed from the emerging data and ongoing analysis, with later interviews being directed by the emerging theory. The final section encouraged the participants to discuss any further pertinent issues and reflect on the efficacy of the interview. Two pilot interviews were conducted with a retired Paralympian and professional athlete with a disability to check that the interview guide was appropriate, and to refine questioning techniques.

Data Analysis

To analyse the data in this study, the series of methods and systematic procedures proposed by Glaser (2000, 2001) and Strauss and Corbin (1998) were followed. Specifically, in the present study, environmental demands associated primarily and directly with the organization within which the athlete with a disability was operating were firstly identified (e.g., organizational stressors). Following this identification, concepts were developed which represented the meanings of these segments in terms of their properties and dimensions, which were then systematically and logically organized into an exploratory scheme of organizational stressors (cf. Corbin & Strauss, 2008; Strauss & Corbin, 1998). Throughout the analysis, the constant comparative method was used to compare stressors and anecdotes

for similarities, variations, and differences both within and across interviews, as well as comparing across the analysis levels (e.g., stressors to concepts, concepts to concepts; Holt & Tamminen, 2010; Weed, 2009). In accordance with the purpose of this study and grounded theory recommendations to demonstrate conceptual density of the construct studied (i.e. the richness of concept development and relationships; Strauss & Corbin, 1994), the findings of the analyses were reported largely in the form of exploratory schemes (cf. Fletcher et al., 2012). Within these schemes, and at the request of a Reviewer, we have included a frequency count for the number of times an organizational stressor within each stressor concept was cited. To offer richness to and exemplify the grounded concepts, descriptive participant quotes are also provided for the reader (cf. Strauss & Corbin, 1994, 1998)[1].

Results

The results represent the collated interview responses from all 18 athletes with a disability pertaining to the organizational stressors they encounter. A total of 316 organizational stressors emerged from the transcripts, which were abstracted into 31 concepts and four exploratory schemes of the organizational stressors encountered by athletes with a disability (see Figure 1-4). The four schemes are: leadership and personnel issues, cultural and team issues, logistical and environmental issues, and performance and personal issues. Leadership and personnel issues encapsulated the organizational stressors associated with the management and support of a sports team. Cultural and team issues encapsulated the organizational stressors associated with the attitudes and behaviours within a sports team. Logistical and environmental issues encapsulated the organizational stressors associated with the organization of operations for training and/or competition. Performance and personal issues encapsulated the organizational stressors associated with a performer's athletic career and physical self (cf. Arnold & Fletcher, 2012b).

Leadership and Personnel Issues

Leadership and personnel issues consisted of the coach's behaviours and interactions, the coach's personality and attitudes, external expectations, support staff, sports officials, spectators, media, performance feedback, and the governing body (see Figure 1). The coach's behaviours and interactions was the most cited concept in the data and included stressors associated with his or her communication, relationships formed with athletes, and lack of autonomy provided to them. The following quotation illustrates how one athlete received hurtful comments from her coach:

> I had this coach when I was at [Name of city] who told me that I was useless and pathetic, and that I was a drama queen. That really knocked me down and had a massive impact on me. Psychologically, I don't think I'm very good anymore and I don't believe in myself because he told me these things. (Participant 11)

In addition, many of the athletes with a disability stated that their coach had minimal disability-specific awareness and knowledge. Stressors relating to the coach's personality and attitudes were also cited by the participants, such as their harsh nature, obsession with weight, and differing priorities and opinions to athletes. Participants recalled occasions when they felt expectations from the coach and other stakeholders (e.g., family members, the nation) to perform, win, and/or medal in their sport. Sports officials, spectators, the media, and national governing bodies could also create considerable stressors for athletes with a disability. For example, sports officials who were unfair or patronizing, spectators who were noisy or absent, media personnel who provided close attention to athletes or bad write-ups, and governing bodies who offered a lack of support were all cited by the participants. The following quotation from one participant illustrates a stressor linked to national governing bodies:

> I don't feel that they [Name of national governing body] treat Paralympians and Olympians the same. Olympians get 100% more things – funding, opportunities, competitions – they have a great advantage. It's blatant discrimination . . . and

> their general attitude is ridiculous. The board have started to appoint people who are much more open minded to the possibility of disabled people having a say and a voice within the organization – but it has taken a very long time to get to that. (Participant 17)

Cultural and Team Issues

Cultural and team issues consisted of teammates' behaviours and interactions, communication, team atmosphere and support, teammates' personality and attitudes, roles, cultural norms, and goals (see Figure 2). Example stressors relating to the personality and attitudes of international teammates included those who were arrogant, negative, and generally incompatible with the group. Furthermore, athletes on the team who were argumentative or made negative comments also created pressure for the participants. The athletes with a disability also cited the occurrence of communication breakdowns within the international team, sometimes occurring as a consequence of the difficulties associated with communicating to teammates with particular disabilities. These factors were typically perceived to create an intense or stressful team atmosphere, where athletes often did not feel wholly connected to or supported by their team. One member on the team, who by the nature of their role, is expected to provide support is that of the captain. Participants who had undertaken this captaincy role cited the stressors that accompanied such a role, and the following quotation provides insight into some of these:

> As a captain, you have to manage your team's various personalities, and that is even more present in disability sport because, as a captain, you have to understand all of the disabilities and their connotations within your team. I found that very hard to start off with as I had never experienced disability sport, coming from a mainstream sport. Suddenly I had to deal with a teammate in a wheelchair and that was very hard for me. (Participant 16)

An additional demand for both captains and those without direct leadership responsibilities were the need to meet team expectations. Participants cited various stressors associated with conforming to cultural norms, including the expectation to wear kit, always be on time, and support the rest of the team at competitions. The goals that were set for athletes with a disability were also a cited pressure for them. Stressors within this concept related to setting goals that seemed too distant or big to achieve, having a lack of team goals, differing and sometimes competing individual goals within a group, and changing goals. The following quotation provides insight into a goal-related stressor:

> My goals were lowered in order to take some pressure off myself. Back in 2004 and thinking ahead to 2012, we [athlete and coach] were saying "The world's not going to know what's happened because I'm going to come away with gold and leave a time in that event that's going to stand for years" because we had a plan in place that we thought would make it possible. As we crept closer to the date, I started thinking this isn't going to happen, what I'm going to do. Then I was thinking ok so I'll be happy coming away with a bronze medal and then it was actually s**t am I actually even going to get to the Paralympics? (Participant 2)

Logistical and Environmental Issues

Logistical and environmental issues consisted of facilities and equipment, selection, competition format, structure of training, weather conditions, travel, accommodation, rules and regulations, distractions, physical safety, and technology (see Figure 3). In addition to a lack of equipment, participants also cited stressors in this concept linked to its transportation, fixing, quality, and costs. Moreover, facilities that were perceived to be "disability unfriendly" were also recalled by participants as a significant stressor. Further to the facilities at or venue of a competition, its format was also a concept identified in the data analyses. Specifically, stressors included a lack of down time between events, registration queues,

minimal staff presence, lack of communication on competition organization, poor pacemakers, and the inappropriate number of competitors. A lack of information on and previous exposure to weather conditions at competitions was also a stressor for participants, as were various distractions, concerns over physical safety, and enhancements in technology. Turning from competition to training, participants commented that a lack of disability-specific training placed a demand on them. This seemed to be particularly salient if their coach was also providing support to athletes without a disability simultaneously and seemingly applying a universal approach to both rather than, for example, "delving deeper into biomechanically how we are different as that would change absolutely everything right down to the drills" (Participant 7). A prominent concept identified by participants in this exploratory scheme was selection for a team or competition, with many athletes identifying a perceived unfair, changing, unsupportive, poorly timed, and subjective process. In contrast to this latter demand, one athlete spoke of the selection process not being subjective but instead being too objective, as the following quotation demonstrates:

> Selection policies are always controversial and relay seems to be more so because of the way it is done. What they do with the relay [selection] set up is they have to be objective. They have to take the emotional side out of the event. The problem with this is you have some athletes that are big event swimmers and some that are not; some put pressure on .themselves, whereas others handle the pressure and swim well. I am a big event racer, my times are always there and put me in a relay and they are even better. So you can't take my individual race and use that as a number for selection because in the past I have proven that my individual time to relay time is a second and a half different. (Participant 10)

Various stressors relating to the concepts of travel and accommodation were also encountered. Example demands included the difficulty in getting to training, a lack of

disabled parking, the organization of travel, travelling times/distances, room sharing, roommate incompatibility, and accommodation locations. Unique to athletes with a disability is the classification system used by the International Paralympic Committee (IPC) in an attempt to ensure competition is fair and equal by minimizing the impact impairment has on the outcome of the competition. Competition for individuals with impairments is structured into categories based on the impairment type and the extent to which the impairment impacts sport performance. . It is through this evidence-based disability classification that the IPC determines which athlete is allowed to compete in which sport, also termed eligibility. The interviews revealed that the classification system was a commonly reported stressor by athletes with a disability and, along with other rules and regulations, included the classification process occurring late or being changed, and certain classifications being perceived as unfair or incorrect. The following quote from one athlete illustrates her experiences of the classification system and the demands it placed upon her:

> The classification system changed in Athletics post [name of Olympic host venue] so I wasn't eligible to compete in anything other than 400m. I was only eligible before [name of Olympic host venue] to compete up to the 1500m where as I said I am an endurance athlete and a cross-country runner so 1500m was already pretty hard to drop down to that level. I knew I didn't have enough speed to compete in those events and I am not a spring chicken anymore so I had to transfer sports and give [name of new sport] a go. (Participant 7)

Performance and Personal Issues

Performance and personal issues consisted of injuries, finances, diet and hydration, and career transitions (see Figure 4). The stressors relating to injuries included an incorrect diagnosis for injury, paying for treatment, lack of support when injured, and career termination because of injury. In addition to funding treatments, there were a number of

demands placed on athletes relating to finances. For example, participants reported pressures associated with a general lack of funding, having to find sponsorship, relying on family members for financial support, the responsibilities that come with being funded, perceived unfairness in finance distributions, and having to plan funding for retirement. The following quotation from one participant illustrates some of the stressors associated with finances:

> The funding provides you the opportunity to not work and focus on your sport. The funding allocations are quite cut throat and particularly this year because we have a lot more people who have made the criteria, but won't be funded and I think that is really harsh – so it is quite a stressful tome for a lot of us. Added to that, it is annoying because you want to be deemed the same as the able-bodied individuals but they are always paid more, there is always more money for them. (Participant 3)

A further performance and personal issue that arose related to diet and hydration. Specifically, participants spoke about a lack of variety in food provision, the standard of food offered, dissimilarity of food when away at competitions to home provisions, and a pressure to maintain an optimal weight. The most commonly cited issue relating to diet and hydration, however, was that meal times were often inappropriate, as illustrated in the following quotation:

> The biggest thing I always found hard was that you go on a training camp and not really have any breakfast before you do your first training, then have breakfast two hours later. Having then done nothing you are given lunch, then two hours of nothing then you train hungry again. They expect you to race really hard and then you have a very late evening meal. To me it was all wrong and those meal times should be planned around training sessions in consultation with athletes.

> Producing snacks is not a good enough answer – you need to have the right requirements. (Participant 14)

The final performance and personal issue was career transitions. This involved transitioning into an alternative sport or work, planning for post-retirement, and transitioning from being a student athlete to an elite level or from able-bodied to disability sport.

Discussion

Organizational stressors are prevalent and problematic for sport performers (Arnold & Fletcher, 2012b; Fletcher et al., 2012). Extant literature, however, has generally focused on able-bodied athletes; whilst that which has been conducted on athletes with a disability has typically recruited relatively small samples to explore a narrow selection of organizational stressors, or other components of the stress process (see, e.g., Campbell & Jones, 2002a, 2002b). The purpose of the present study, therefore, was to explore the various organizational stressors that athletes with a disability encounter. There are two novel, overarching messages to emerge from this study and its findings. The first message is that organizational stressors are highly prevalent for athletes with a disability, just like they are for able-bodied performers. Indeed in this study of 18 athletes with a disability, a total of 316 distinct organizational stressors emerged that had been encountered as part of their involvement in competitive sport. The second, related message is that whilst many similarities emerged between athletes with a disability's organizational stressor encounters and those previously reported by able-bodied performers, there were also a number of distinct, disability-specific demands.

To elaborate on the similarities between able-bodied and athletes with a disability's organizational stressor encounters, the four categories and 31 subcategories of organizational stressors used in Arnold and Fletcher's (2012b) taxonomic classification were also deemed appropriate for analyses in the current study. Example organizational stressors ("elements";

Arnold & Fletcher, 2012b) within these categorizations that were similar between the two groups include: an incompatible coaching style, unfair selection processes, the structuring of events at competitions, and expectations to get a medal (see Figures 1-4). Notwithstanding this observation, participants reported additional organizational stressors beyond those previously reported by able-bodied athletes. These included, but were not limited to, inaccessible venues for disability requirements, lack of disability-specific coaching and training, captaincy role pressure to understand different disabilities, lack of crowd at disability events, distractions of Paralympic Games being first international competition, costs of disability specific equipment, transitions from able-bodied to disability sport, and the disability classification system. While it is beyond the scope of this paper to discuss each of the idiosyncratic stressors, the following narrative will elaborate on three prominent disability-specific organizational stressors: the lack of crowd at disability events, the lack of disability-specific coaching and training, and the disability classification system.

Taking first the lack of a crowd at disability events, this stressor has not typically been reported in previous studies examining the organizational stressors encountered by able-bodied athletes. Indeed, in such studies, the stressors reported tend to relate to the characteristics of a crowd (e.g., hostile and abusive crowd, unpleasant spectators) rather than no crowd at all (Arnold & Fletcher, 2012b). Similar to many of the other disability-specific stressors identified in this study, it is clear that this crowd-related stressor is not caused by the athletes' disability per se, but instead by barriers (e.g., attitudinal, physical) created by society (cf. Campbell & Jones, 2002b). This suggestion is in accordance with the social model of disability which suggests that disability is caused by the way society is organized (e.g., systemic barriers, negative attitudes, societal exclusion), rather than by a person's difference or impairment (Hasler, 1993; Perrier & Smith, 2014; Shakespeare, 2006).

Turning to the stressors associated with the lack of disability-specific coaching and training, this result can be somewhat explained by previous data collected from coaches (see, e.g., Cregan, Bloom, & Reid, 2007; DePauw & Gavron, 1991, 2005; Dieffenbach, Statler, & Moffett, 2009; Martin, 2010). Specifically, these studies have found that coaches working with sport performers with a disability report limited exposure to, qualifications, or training in coaching disability-specific sports at the start of the working relationship; hence, explaining why such stressors may occur. Given the detrimental effects that such a stressor can have on the effectiveness of the coach-athlete relationship, athletic experiences, and performance (cf. Campbell & Jones, 1997, 2002b; DePauw, 1994; DePauw & Gavron, 1991, 2005; Hanrahan, 2007; Jowett, 2003; Poczwardowski, Barot, & Henschen, 2002), these findings have significant implications for coach education and development programs. Specifically, the findings highlight that disability awareness must be enhanced within such programs so that an optimal coach-athlete relationship is formed and training sessions are appropriate for athletes with a disability. Indeed, in addition to teaching coaches strategies to help athletes with a disability build confidence (Ferreira, Chatzisarantis, Gasper, & Campos, 2007), communicate effectively (Cregan et al., 2007), and develop coping skills (Campbell & Jones, 2002b), the current findings also highlight the importance of coaches facilitating athletes with a disability's autonomy (cf. Banack, Sabiston, & Bloom, 2011; Deci & Ryan, 1985).

A novel rules and regulations organizational stressor that emerged from the athletes with a disability's data, which has not been previously reported by able-bodied athletes, is the disability classification system. This system is used by the IPC in an attempt to minimize the impact of impairments on sport and ensure competition is fair and equal. Example stressors associated with this system included the classification process occurring late or being changed, certain classifications being perceived as unfair or incorrect, too much diversity in

classes, a lack of communication over classification, and having to adjust to a disability classification. Since the origins of disability classification in sport, there has been a move from an assessment of an athlete's handicap to a more positively framed determination of his or her ability (Dieffenbach & Statler, 2012; Thomas & Smith, 2009). Notwithstanding this evolution, the current results suggest that there is a significant need for the IPC, disability sport governing bodies, and sport psychologists to work with athletes with a disability to better understand and address the demands that current classification processes can place on performers. Since the classification system shares some similarities to processes designed to group athletes by weight (e.g., boxing) or physical maturity (e.g., bio-banding; Mitchell, Haase, Malina, & Cumming, 2016), organizations and practitioners operating within such sports and systems should also remain aware of the potential demands that can accompany these practices.

This study has methodological strengths and limitations which must be acknowledged when interpreting the findings. The sample composition adopted is a notable strength, since psychological science can be enriched by the significance and distinctiveness of the major championship experience possessed by the athletes with a disability in this study (cf. Simonton, 1999). Furthermore, the sample was a strength given that it constituted an underrepresented population in extant organizational stress research (cf. Arnold & Fletcher, 2012b) and advanced what is known about organizational stress in disability sport. That said, the sample size can be considered a limitation of this study; therefore, future research should look to extend the generalizability of the study's findings by exploring the organizational stressor experiences of a larger sample of performers with a disability who compete in sport at a variety of levels and report (across the sample) all ten eligible impairment types as classified by the Paralympic Movement.. This increased sample size will be an important future research direction to pursue as being disabled is only one part of a person's identity

(see also Arnold et al., 2015); therefore, the current results are not generalizable across the entire population of athletes with a disability. To assist with this suggested future research direction, scholars could use the OSI-SP (Arnold et al., 2013) to measure the dimensions of the demands that the participants encounter and, in doing so, further validate the measure for disabled populations. Whilst the interviews in this study enabled participants to reflect on their organizational stressor experiences, future research should examine the interface between and interactive impact of these and other types of stressors (e.g., competitive, personal) on sport performers with a disability (Fletcher et al., 2006). Furthermore, given the transactional nature of stress, it will be important for scholars to examine further components of the stress process in athletes with a disability's experiences, the relationships between these facets, and the reciprocal and adaptive nature of the process (Fletcher & Arnold, 2016).

Turning to the praxis of these findings, there is typically an emphasis in stress management interventions on changing an individual's reactions to stressors (cf. Dieffenbach et al., 2009; Martin, 2005; Rumbold et al., 2012). This focus is somewhat in accordance with the medical model of disability, which defines disability as a property of an individual's body which requires intervention (Falvo, 2013). In accordance with the social model of disability, which advocates that disability is caused by the way society is organized (Hasler, 1993; Perrier & Smith, 2014; Shakespeare, 2006), it is instead suggested from this study that sports organizations and event organizers more fully acknowledge their own role in athletes with a disability's organizational stressor experiences. Indeed, to minimize the frequency and/or intensity of the organizational demands that athletes with a disability encounter, a primary stress management intervention should be developed (PSMI; Cox, Taris, & Nielson, 2010; Sutherland & Cooper, 2000).

In accordance with the present findings, it is suggested that this proactive and preventative PSMI makes changes in the macro environment (e.g., cultural changes in the

resource distributions and attention given to Olympic and Paralympic athletes), the micro environment (e.g., working with coaches to make training sessions more disability-specific), and athletes with a disability's perceptions of control (e.g., providing athletes with a disability with more autonomy). To assist with such interventions, athletes with a disability and sporting organizations may require the support of a sport psychologist. Despite athletes and coaches expressing an interest in such support (cf. Dieffenbach & Statler, 2012; Dieffenbach et al., 2009), this study highlighted that a stressor for athletes is not having access to a psychologist. Service providers and psychologists, therefore, need to creatively consider ways in which they might be able to connect with athletes with a disability and their affiliated sports organizations (see, e.g., Jex & Britt, 2014; Pitt et al., 2015).

To conclude, this study has been the first to explore the various organizational stressors that athletes with a disability encounter. The novel findings have highlighted the prevalence of organizational demands for athletes with a disability, and the similarities and distinct differences between the stress experiences of those performers with and without a disability. Practically, the findings have significant implications for practice, as can specifically guide practitioners in their work with sport organizations and performers with a disability, in developing and implementing appropriate and impactful, evidence-based stress management interventions. .

Footnote

[1] Due to space restrictions, only a selection of the distinct raw data quotes are presented in this paper. For a complete copy of this data, please contact the corresponding author.

References

Arnold, R., & Fletcher, D. (2012a). Psychometric issues in organizational stressor research: A review and implications for sport psychology. *Measurement in Physical Education and Exercise Science, 16,* 81-100. doi: 10.1080/1091367x.2012.639608

Arnold, R., & Fletcher, D. (2012b). A research synthesis and taxonomic classification of the organizational stressors encountered by sport performers. *Journal of Sport and Exercise Psychology, 34,* 397-429.

Arnold, R., & Fletcher, D. (2015). Confirmatory factor analysis of the Sport Emotion Questionnaire in organisational environments. *Journal of Sports Sciences, 33* (2), 169-179.

Arnold, R., Fletcher, D., & Daniels, K. (2013). Development and validation of the Organizational Stressor Indicator for Sport Performers (OSI-SP). *Journal of Sport and Exercise Psychology, 35,* 180-196.

Arnold, R., Fletcher, D., & Daniels, K. (2015). Demographic differences in sport performers' experiences of organizational stressors. *Scandinavian Journal of Medicine and Science in Sports.* Advance online publication. doi: 10.1111/sms.12439

Arnold, R., Fletcher, D., & Daniels, K. (2016). Organizational stressors, coping and outcomes in competitive sport. *Journal of Sports Sciences.* Advance online publication.

Banack, H. R., Sabiston, C. M., & Bloom, G. A. (2011). Coach autonomy support, basic need satisfaction, and intrinsic motivation of Paralympic athletes. *Research Quarterly for Exercise and Sport, 82,* 722-730. doi: 10.5641/027013611x13275192111989

Bawden, M. (2005). Providing sport psychology support for athletes with disabilities. In J. Dosil (Ed.), *The sport psychologist's handbook: A guide for sport-specific performance enhancement* (pp. 665-683). Chichester, UK: John Wiley & Sons Ltd.

Blumenstein, B., & Orbach, I. (2015). Psychological preparation for Paralympic athletes: A preliminary study. *Adaptive Physical Activity Quarterly, 32,* 241-255. doi:

10.1123/APAQ.2014-0235

Buman, M. P., Omli, J. W., Giacobbi, P. R., & Brewer, B. W. (2008). Experiences and coping responses of "hitting the wall" for recreational marathon runners. *Journal of Applied Sport Psychology, 20*, 282-300. doi: 10.1037/e519792007-001

Bush, A., Silk, M., Porter, J., & Howe, P. D. (2013). Disability [sport] and discourse: Stories within the Paralympic legacy. *Reflective Practice, 14*, 632-647. doi: 10.1080/14623943.2013.835721

Campbell, E., & Jones, G. (1997). Pre-competition anxiety and self-confidence in wheelchair sport participants. *Adapted Physical Activity Quarterly, 14,* 96-107.

Campbell, E., & Jones, G. (2002a). Cognitive appraisal of sources of stress experienced by elite male wheelchair basketball players. *Adapted Physical Activity Quarterly, 19,* 100-108.

Campbell, E., & Jones, G. (2002b). Sources of stress experienced by elite male wheelchair basketball players. *Adapted Physical Activity Quarterly, 19,* 82-99.

Charmaz, K. (2005). Grounded theory in the 21st century: Applications for advancing social justice studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed, pp. 507-535). Thousand Oaks, CA: Sage.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis.* Thousand Oaks, CA: Sage.

Corbin, J. M., & Strauss, A. L. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory.* Thousand Oaks, CA: Sage.

Cox, T., Taris, T. W., & Nielson, K. (Eds.). (2010). Organizational interventions: Issues and challenges [Special issue]. *Work and Stress, 24,* 217-307. doi:10.1080/02678373.20 10.519496

Cregan, K., Bloom, G., & Reid, G. (2007). Career evolution and knowledge of elite coaches of swimmers with a physical disability. *Research Quarterly for Exercise & Sport, 78,*

339-350. doi: 10.1080/02701367.2007.10599431

Cross, M., Williams, S., Trewartha, G., Kemp, S., & Stokes, K. (2015). The influence of in-season training loads on injury risk in professional rugby union. *International Journal of Sports Physiology and Performance.* Advance online publication. doi: 10.1123/ijspp.2015-0187

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior.* New York, NY: Plenum.

DePauw, K. P. (1994). A feminist perspective on sport and sports organizations for persons with disabilities. In R. D. Steadward, E. R. Nelson, & G. D. Wheeler (Eds.), *VISTA 93 - The outlook* (pp. 457-477). Edmonton, Canada: Rick Hansen Centre.

DePauw, K. P., & Gavron, S. J. (1991). Coaches of athletes with disabilities. *Physical Educator, 48,* 33-40.

DePauw, K. P., & Gavron, S. J. (2005). *Disability sport* (2nd ed.). Champaign, IL: Human Kinetics.

DiBartolo, P. M., & Shaffer, C. (2002). A comparison of female college athletes and non-athletes: Eating disorder symptomatology and psychological well-being. *Journal of Sport and Exercise Psychology, 24,* 33-42.

Dieffenbach, K. D., & Statler, T. A. (2012). More similar than different: The psychological environment of Paralympic sport. *Journal of Sport Psychology in Action, 3,* 109-118. doi: 10.1080/21520704.2012.683322

Dieffenbach, K., Statler, T., & Moffett, A. (2009). *Pre and post Games perceptions of factors influencing coach and athlete performance at the Beijing Paralympics**. Final report. Colorado Springs, CO: USOC and Paralympic Program. * Report available on request from author.

Falvo, D. R. (2013). *Medical and psychosocial aspects of chronic illness and disability.*

Burlington, MA: Jones and Bartlett Learning.

Ferreira, J. P., Chatzisarantis, N., Gaspar, P. M., & Campos, M. J. (2007). Precompetitive anxiety and self-confidence in athletes with disability. *Perceptual & Motor Skills, 105,* 339-346. doi: 10.2466/pms.105.5.339-346

Fletcher, D., & Arnold, R. (2016). Stress in sport: The role of the organizational environment. In C.R.D Wagstaff (Ed.), *An organizational psychology of sport: Key issues and practical applications*. London: Routledge.

Fletcher, D., Hanton, S., & Mellalieu, S. D. (2006). An organizational stress review: Conceptual and theoretical issues in competitive sport. In S. Hanton & S. D. Mellalieu (Eds.), *Literature reviews in sport psychology* (pp. 321-373). Hauppauge, NY: Nova.

Fletcher, D., Hanton, S., & Wagstaff, C. R. D. (2012). Performers' responses to stressors encountered in sport organizations. *Journal of Sports Sciences, 30,* 349-358. doi: 10.1080/02640414.2011.633545

Fletcher, D., Rumbold, J. L., Tester, R., & Coombes, M. S. (2011). Sport psychologists' experiences of organizational stressors. *The Sport Psychologist, 25,* 363-381.

Fletcher, D., & Scott, M. (2010). Psychological stress in sports coaches: A review of concepts, research and practice. *Journal of Sports Sciences, 28,* 127-137. doi: 10.1080/02640410903406208

Flick, U. (2009). *An introduction to qualitative research.* London, UK: Sage.

French, D., & Hainsworth, J. (2001). 'There aren't any buses and the swimming pool is always cold!': Obstacles and opportunities in the provision of sport for disabled people. *Managing Leisure, 6,* 35-49. doi: 10.1080/13606710010026359

Glaser, B. G. (1992). *Basics of grounded theory analysis: Emergence versus forcing.* Mill Valley, CA: Sociology Press.

Glaser, B. G. (2000). The future of grounded theory. *Grounded Theory Review, 1,* 1-8.

Glaser, B. G. (2001). Doing grounded theory. *Grounded Theory Review, 2*, 1-18.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. New York, NY: Aldine de Gruyter.

Gould, D., Guinan, D., Greenleaf, C., Medbery, R., & Peterson, K. (1999). Factors affecting Olympic performance: Perceptions of athletes and coaches from more and less successful teams. *The Sport Psychologist, 13,* 371-394.

Hanrahan, S. J. (2007). Athletes with disabilities. In G. Tenenbaum & R. C. Eklund (Eds.), *Handbook of sport psychology* (3rd ed., pp. 845-858). Hoboken, NJ: John Wiley.

Hanton, S., Fletcher, D., & Coughlan, G. (2005). Stress in elite sport performers: A comparative study of competitive and organizational stressors. *Journal of Sports Sciences, 23,* 1129-1141. doi: 10.1080/02640410500131480

Harwood, C., & Knight, C. J. (2009). Understanding parental stressors: An investigation of British Tennis parents. *Journal of Sports Sciences, 27,* 339-351. doi: 10.1080/02640410802603871

Hasler, F. (1993). Developments in the disabled people's movement. In J. Swain, S. French, C. Barnes, & C. Thomas (Eds.), *Disabling barriers, enabling environments*. London, UK: Sage.

Holt, N. L., & Tamminen, K. A. (2010). Improving grounded theory research in sport and exercise psychology: Further reflections as a response to Mike Weed. *Psychology of Sport and Exercise, 11,* 405-413. doi: 10.1016/j.psychsport.2009.12.002.

Huang, C. J., & Brittain, I. (2006). Negotiating identities through disability sport. *Sociology of Sport Journal, 23,* 352-375.

International Paralympic Committee. (2015). *The IPC – What we do*. Retrieved from http://www.paralympic.org/the-ipc/paralympic-games

Jex, S. M., & Britt, T. W. (2014). *Organizational psychology*. Hoboken, NJ: Wiley.

Jowett, S. (2003). When the honeymoon is over: A case study of a coach-athlete dyad in crisis. *The Sport Psychologist, 17,* 446-462.

Martin, J. J. (2005). Sport psychology consulting with athletes with disabilities. *Sport and Exercise Psychology Review, 1,* 32-39.

Martin, J. J. (2010). Athletes with disabilities. In S. J. Hanrahan & M. B. Anderson (Eds.), *Routledge handbook of applied sport psychology: A comprehensive guide for students and practitioners* (pp. 432-440). London, UK: Routledge.

Martin, J. J., & McCaughty, N. (2004). Coping and emotion in disability sport. In D. Lavallee, J. Thatcher, & M. Jones (Eds.), *Coping and emotion in sport* (pp. 225-238). Abingdon, UK: Nova Science Publishers.

Mitchell, S. B., Haase, A. M., Malina, R. M., & Cumming, S. P. (2016). The role of puberty in the making and breaking of young ballet dancers: Perspectives of dance teachers. *Journal of Adolescence, 47,* 81-89. doi: 10.1016/j.adolescence.2015.12.007

Noblet, A., Rodwell, J., & McWilliams, J. (2003). Predictors of the strain experienced by professional Australian footballers. *Journal of Applied Sport Psychology, 15,* 184-193. doi: 10.1080/10413200305394

Patton, M. Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage.

Pensgaard, A. M., Roberts, G. C., & Ursin, H. (1999). Motivational factors and coping strategies of Norwegian Paralympic and Olympic winter sport athletes. *Adapted Physical Activity Quarterly, 16,* 238-250.

Perrier, M. J., & Smith, B. (2014). Understanding disability, sport and exercise: Models and narrative inquiry. In R. Eklund & G. Tenenbaum (Eds.), *Encylopaedia of Sport and Exercise Psychology*. London, UK: Sage.

Pitt, T., Lindsay, P., Thomas, O., Bawden, M., Goodwill, S., & Hanton, S. (2015). A perspective on consultancy teams and technology in applied sport psychology.

Psychology of Sport and Exercise, 16, 36-44. doi: 10.1016/j.psychsport.2014.07.002

Poczwardowski, A., Barot, J. E., & Henschen, K. P. (2002). The athlete and coach: Their relationship and its meaning. *International Journal of Sport Psychology, 33,* 116-140.

Pummell, B., Harwood, C., & Lavallee, D. (2008). Jumping to the next level: A qualitative examination of within-career transition in adolescent riders. *Psychology of Sport and Exercise, 9,* 427-447. doi: 10.1016/j.psychsport.2007.07.004

Rubin, H. J., & Rubin, I. S. (2011). *Qualitative interviewing: The art of hearing data.* Washington, DC: Sage.

Rumbold, J. L., Fletcher, D., & Daniels, K. (2012). A systematic review of stress management interventions with sport performers. *Sport, Exercise, and Performance Psychology, 1,* 173-193. doi: 10.1037/a0026628

Shakespeare, T. (2006). The social model of disability. In L. J. Davis (Ed.), *The disability studies reader* (pp. 214-220). Abingdon, UK: Routledge.

Silverman, D. (2006). *Interpreting qualitative data: Methods for analysing talk, text, and interaction.* London, UK: Sage.

Simonton, D. K. (1999). Significant samples: The psychological study of eminent individuals. *Psychological Methods, 4,* 425-451. doi: 10.1037//1082-989x.4.4.425

Sparkes, A. C., & Smith, B. (2014). *Qualitative research methods in sport, exercise and health: From process to product.* New York, NY: Routledge.

Sport England. (2012). *Disability in sports participation.* Retrieved from http://www.sportengland.org/research/encouraging-take-up/key-influences/sport-and-disability/

Strauss, A. (1987). *Qualitative analysis for social scientists.* New York, NY: Cambridge University Press.

Strauss, A., & Corbin, J. (1994). Grounded theory methodology: An overview. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 273-285).

Thousand Oaks, CA: Sage.

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory.* Thousand Oaks, CA: Sage.

Sutherland, V. J., & Cooper, C. L. (2000). *Strategic stress management: An organizational approach.* New York, NY: Palgrave.

Tabei, Y., Fletcher, D., & Goodger, K. (2012). The relationship between organizational stressors and athletes burnout in soccer players. *Journal of Clinical Sport Psychology, 6,* 146-165.

Thomas, N., & Smith, A. (2009). *Disability, sport and society: An introduction.* London, UK: Routledge.

Vergeer, I. (2006). Exploring the mental representation of athletic injury: A longitudinal study. *Psychology of Sport and Exercise, 7,* 99-114. doi: 10.1016/j.psychsport.2005.07.003

Voight, M. (2009). Sources of stress and coping strategies of US soccer officials. *Stress and Health, 25,* 91-101. doi: 10.1002/smi.1231

Weed, M. (2009). Research quality considerations for grounded theory research in sport and exercise psychology. *Psychology of Sport and Exercise, 10,* 502-510. doi: 10.1016/j.psychsport.2009.02.007.

Wheeler, G. D., Malone, L. A., Vlack, S. V., Nelson, E. R., & Steadward, R. D. (1996). Retirement from disability sport: A pilot study. *Adapted Physical Activity Quarterly, 13,* 382-399.